

JOINT PHOTOGRAPHIC INTELLIGENCE REPORT

MISSILE - RELATED ACTIVITY
MAKAT AREA, USSR



ARMY



NAVY



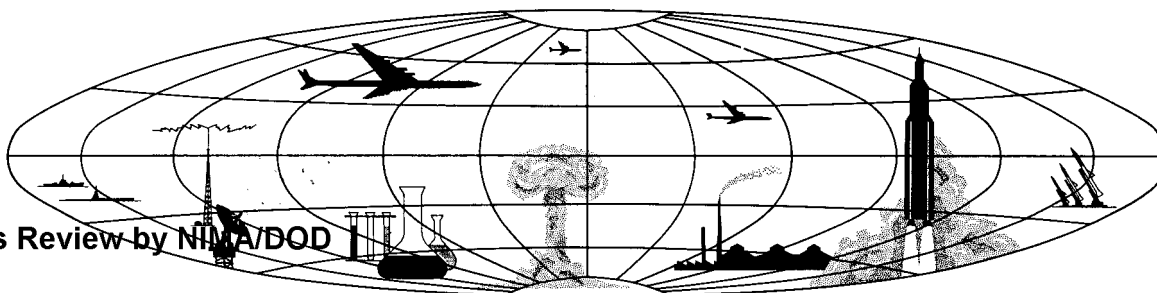
CIA



NSA

25X

Published and Disseminated by CENTRAL INTELLIGENCE AGENCY Photographic Intelligence Center



Declass Review by NIMA/DOD

TOP SECRET

~~TOP SECRET~~

25X1

JOINT PHOTOGRAPHIC INTELLIGENCE REPORT

MISSILE - RELATED ACTIVITY

MAKAT AREA, USSR

PIC/JR-4/61

May 1961

Published and Disseminated by

CENTRAL INTELLIGENCE AGENCY

PHOTOGRAPHIC INTELLIGENCE CENTER

~~TOP SECRET~~

25X1

~~TOP SECRET~~

25X1

PIC/JR-4/61

PREFACE

This joint report, based on communications and photographic intelligence, has been prepared by the Army, Navy, Central Intelligence Agency, and National Security Agency in answer to CIA requirement SI/R-37/61, which requests a search of the Makat area of the USSR for a missile field launch site placed by [] as possibly in this general area. In addition to answering this requirement, the report presents a compilation of numerous other Makat area missile-related activities as reflected in [] and includes the results of a detailed examination of satellite photography made in a search for these facilities.

It should be noted that reported coordinates of items observed on photography were calculated from very inaccurate maps (scale, 1:500,000) and should not be considered precise. All mile distances given are in nautical miles.

~~TOP SECRET~~

25X

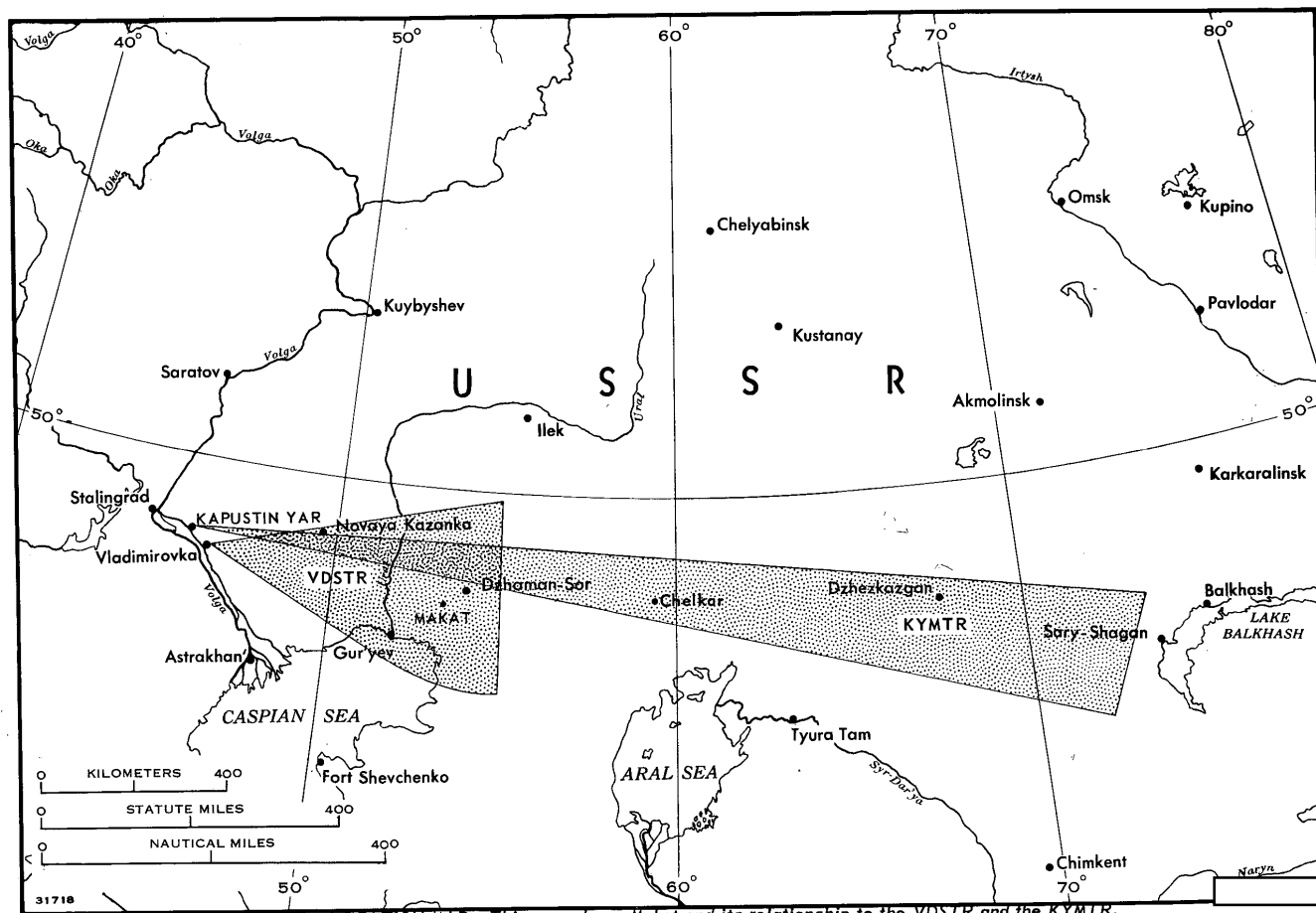


FIGURE 1. LOCATION MAP. This map shows Makat and its relationship to the VDSTR and the KYMTR.

PIC/JR-4/61

INTRODUCTION

Makat (47-39N 53-19E), located 65 miles northeast of the city of Gur'yev, is a well known oil-handling center serving large oil fields located in the nearby salt marshes which border the northeastern shore of the Caspian Sea. The Makat area has long been known, [] to be associated with missile activity. In addition to the relatively new suspect field launch point, associated with the Sary Shagan Antimissile Test Complex (SSATC), the Kapustin Yar Missile Test Range (KYMTR) and the Vladimirovka/Dzhaman-Sor Test Range (VDSTR) both have facilities in the Makat area; instrumentation facilities associated with the Tyuratam Missile Test Range (TTMTR) are also known to be located near Makat. Makat is 300 miles east of the KYMTR rangehead and 750 miles west of the 1,050-mile ("T-1") impact area in the SSATC (see Figure 1).

25X1

[] the following missile-associated facilities are in the Makat area:

1. Makat FLIM FLAM Station. 1/
2. KYMTR Outstation A30C/D. 2/
3. VDSTR Outstation B02C. 3/
4. KYMTR nominal 300-mile-range surface-to-surface missile (SSM) impact area. 4/
5. KYMTR nominal 300-mile-range cruise missile impact area. 5/
6. Two VDSTR "CHERUB" air-to-surface missile (ASM) impact areas. 6/
7. Suspect field launch point for SSMs fired into Sary Shagan Area. 7/

Good-quality [] photography of the Makat area was obtained from [] Figure 2 shows the interrelationship of areas of interest found on this photography in the Makat area.

The vicinity of Makat is characterized by extensive oil-handling facilities, with a large oil pipeline and associated pumping stations extending to the northeast toward Aktyubinsk and Orsk and to the southwest to

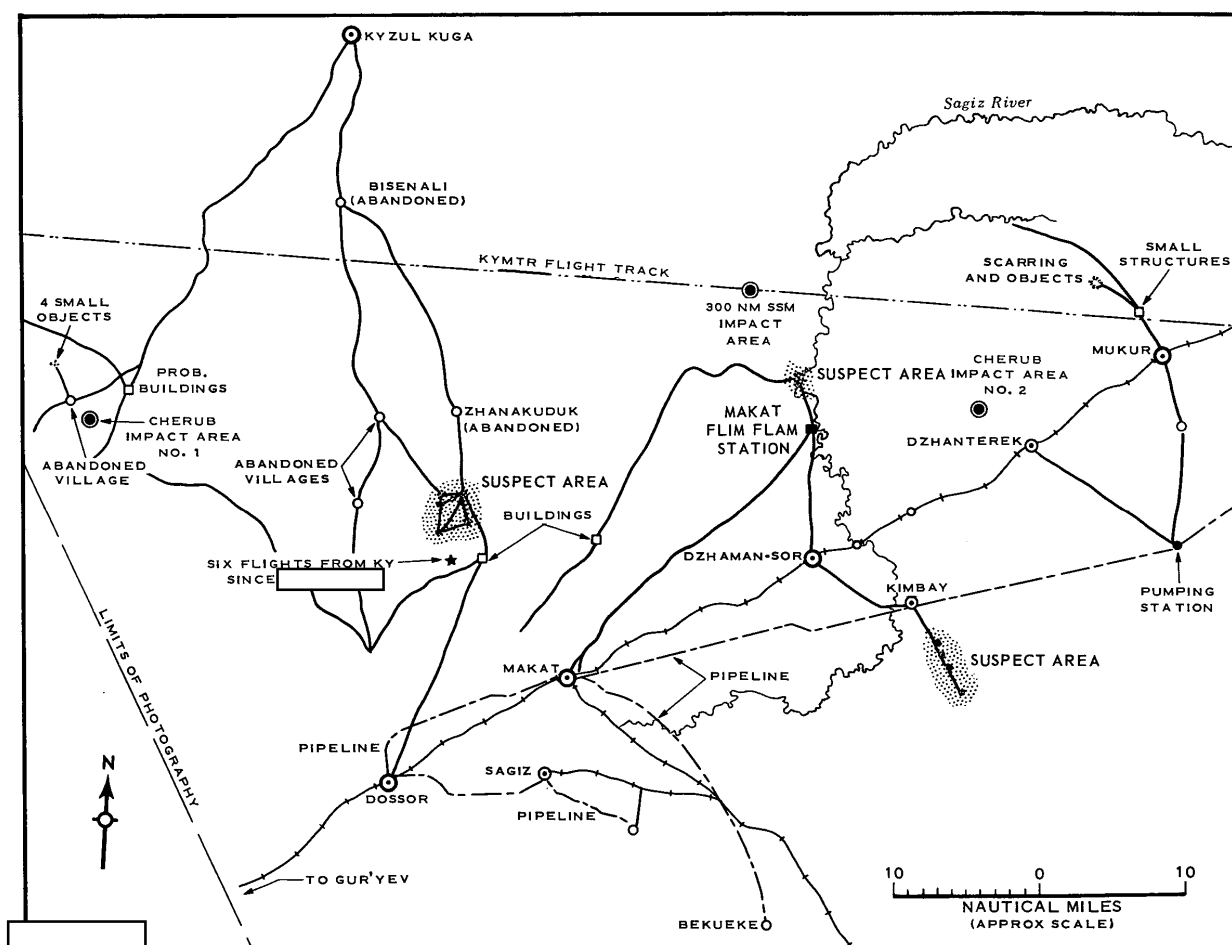


FIGURE 2. MAKAT AREA. This map shows the locations (in red) of missile-related facilities in the Makat area and the interrelationship of areas of activity in the Makat area as plotted from photography.

~~TOP SECRET~~

25X1

PIC/JR-4/61

Gur'yev. A rail line (currently closed to foreign travelers) connecting Gur'yev with Aktyubinsk passes through Makat.

The region north of Makat is the reported location of impact areas for the 300-mile-range SSM, the "CHERUB" ASM, and possibly a currently unidentified cruise-type missile fired recently on the KYMTR. The region surrounding these reported impact areas, which the photography shows is characterized by abandoned villages, heavy track activity, and several small groups of buildings, covers over 3,000 square miles (approximately 60 by 50 miles) of salt marsh and desert terrain traversed by the Sagiz River.

MAKAT FLIM FLAM STATION AND RANGE ELECTRONICS

The Makat FLIM FLAM Station, identified on the [] photography, is located at 47-55N 53-47E, on the west side of the Sagiz River, 24 miles northeast of Makat. The station is served by unpaved roads from Makat and, more immediately, from Dzhaman-Sor (47-47N 53-47E), 9 miles to the south. Dzhaman-Sor is located on the main rail line, 19 miles east-northeast of Makat, and is characterized by a probably secured rail transloading area.

25X1D

The Makat FLIM FLAM station (see Figure 3), consisting of an interferometer, probable instrumentation areas, a control area, an airfield, and a support area, has a marked similarity in most respects to FLIM FLAM Station No 3 on the western shore of Lake Balkhash. 8/ The probable instrumentation areas and the support area at Makat are somewhat larger than those at FLIM FLAM Station No 3, and no other instrumentation areas were found in the Makat area; thus it is possible that KYMTR outstation A30C/D and VDSTR outstation B02C are colocated with the Makat station. The equipment associated with the two outstations would be relatively small in size and would not lend itself to identification on [] photography.

5X1

- 7 -

~~TOP SECRET~~

25X

TOP SECRET

25X

PIC/JR-4/61

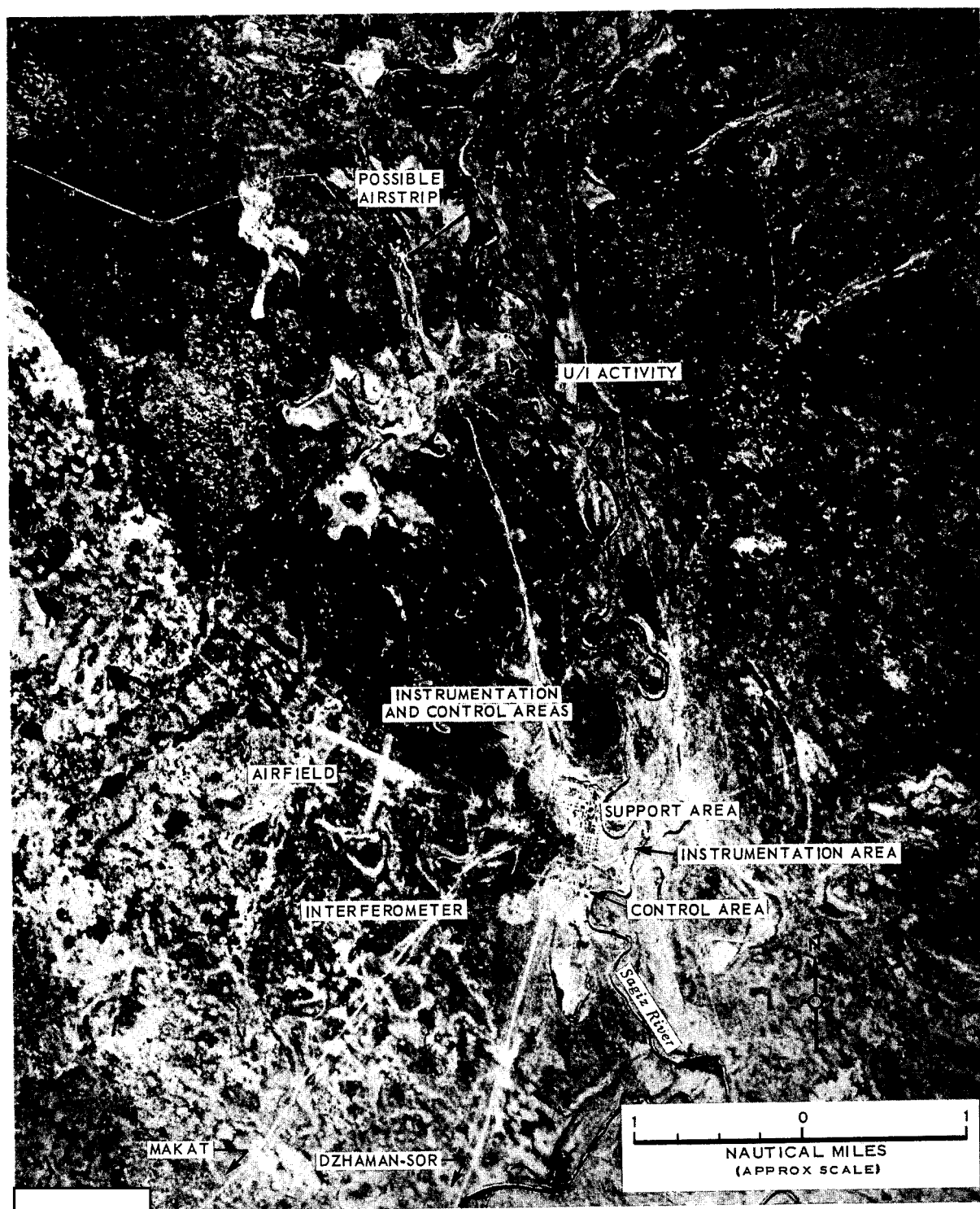


FIGURE 3. MAKAT FLIM FLAM STATION (including area of unidentified activity).

TOP SECRET

25X1

~~TOP SECRET~~

25X1

PIC/JR-4/61

25X1

[REDACTED]

[REDACTED] The coordinates plotted for this facility, identified by the Soviets on at least one occasion as Ak-Chata, are almost precisely the same as the coordinates of the airfield identified on the [REDACTED] photography one mile west of the FLIM FLAM support area.

25X1

IMPACT AREAS

25X1

300-Mile Impact Area (KYMTR Impact Area D)

25X1

[REDACTED]

Another scarred area, similar in general appearance but smaller, is noted at 48-16N 53-10E, 16 miles west of the probable 300-mile SSM impact area. This second area is possibly the impact area for an unidentified KYMTR cruise-type missile recently fired to this general area. Nominal 150-mile-range cruise missiles fired to the 146-mile (270-kilometer) impact area actually land at another point 130 miles (240 kilometers) from the rangehead, or 16 miles west of the SSM impact area 9/; this same arrangement may well be in effect at the 300-mile impact area.

- 9 -

~~TOP SECRET~~

25X1

~~TOP SECRET~~

PIC/JR-4/61

VDSTR "CHERUB" ASM Impact Areas

X1 Two VDSTR "CHERUB" ASM impact areas are located near Makat. Target number 1 is [] near 48-07N 54-07E, 23 miles northeast of Dzhaman-Sor. Visible on the [] photography at 48-10N 54-25E, 11 miles northeast of the [] coordinates, is a heavily scarred area with all activity apparently radiating from a cluster of four small objects. Approximately 4 miles southeast of these objects is a group of five small structures which may be associated with this area.

X1 The other "CHERUB" ASM impact area, target number 2, []
X1 [] near 48-03N 52-36E, 37 miles northwest of Makat. Appearing on the photography at 48-04N 52-40E, 3 miles northeast of the [] is a group of 17 objects, probably small buildings. Five miles northwest of this point is a cluster of four objects similar in size to those at the scarred area near the location of target number 1. Extensive track activity is apparent in the area surrounding these objects.

POSSIBLE SSM LAUNCH FACILITIES

SSATC communications reveal that on 2 March and again on 4 March 1961 an SSM was launched into the Sary Shagan area from a point at least 200 miles east of the KYMTR rangehead; preliminary analysis suggests that these missiles were launched from a point somewhere in the Makat area. An SSATC-associated launch site in this area would probably be similar in size to the field launch point "SP-5", located near Chelkar 10/, although the range involved would probably require the use of nominal 1,100-mile-range missiles rather than the nominal 700-mile-range type launched from "SP-5." Analysis of [] data also suggests that the launch point for the firings of 2 and 4 March is located in the Makat Area. 11/

25X1D The [] photography reveals three areas of activity in the

~~TOP SECRET~~

~~TOP SECRET~~

25X1

PIC/JR-4/61

Makat region which are apparently not associated with the oil industry, range electronics, or impact areas; no positive identification of their function can be made from the photography and any of the areas might be the suspect field launch point. A description of each of the three areas follows.

Suspect Area 1

A generally triangular pattern of ground scars, extending over 3 miles on the longest side, is located at 47-57N 53-05E; in the vicinity are nine small objects, possibly towers (see Figure 4). Approximately 4 miles southeast is a group of 13 structures which may or may not be associated with the scarring; 8 of these are probable buildings. One half mile east of the buildings are four unidentified objects faintly visible on the photography; a road appears to connect these objects with the building area.

[REDACTED] six aircraft flights from Kapustin Yar to an area approximately 2 miles south of the scarred area since [REDACTED] 7/ An unimproved road showing heavy track activity connects the building area with the town of Dossor, 15 miles southwest of Makat on the Aktyubinsk-Gur'yev rail line.

It is evident from the extensive scarring, the building area, and the aircraft flights from Kapustin Yar that an important project is under way at these coordinates. Although this scarring does not resemble that of any known missile-launching activity in the USSR, the building area with its associated unidentified objects could be the field launch point.

Suspect Area 2

Located 25 miles east of Makat at 47-44N 53-58E is the village of Kimbay, which could serve as the support area for the SSM field launch site (see Figure 5). This area is served by road from the same probable secured rail transloading area at Dzhaman-Sor that services the Makat

~~TOP SECRET~~

25X1

TOP SECRET

25X1

PIC/JR-4/61

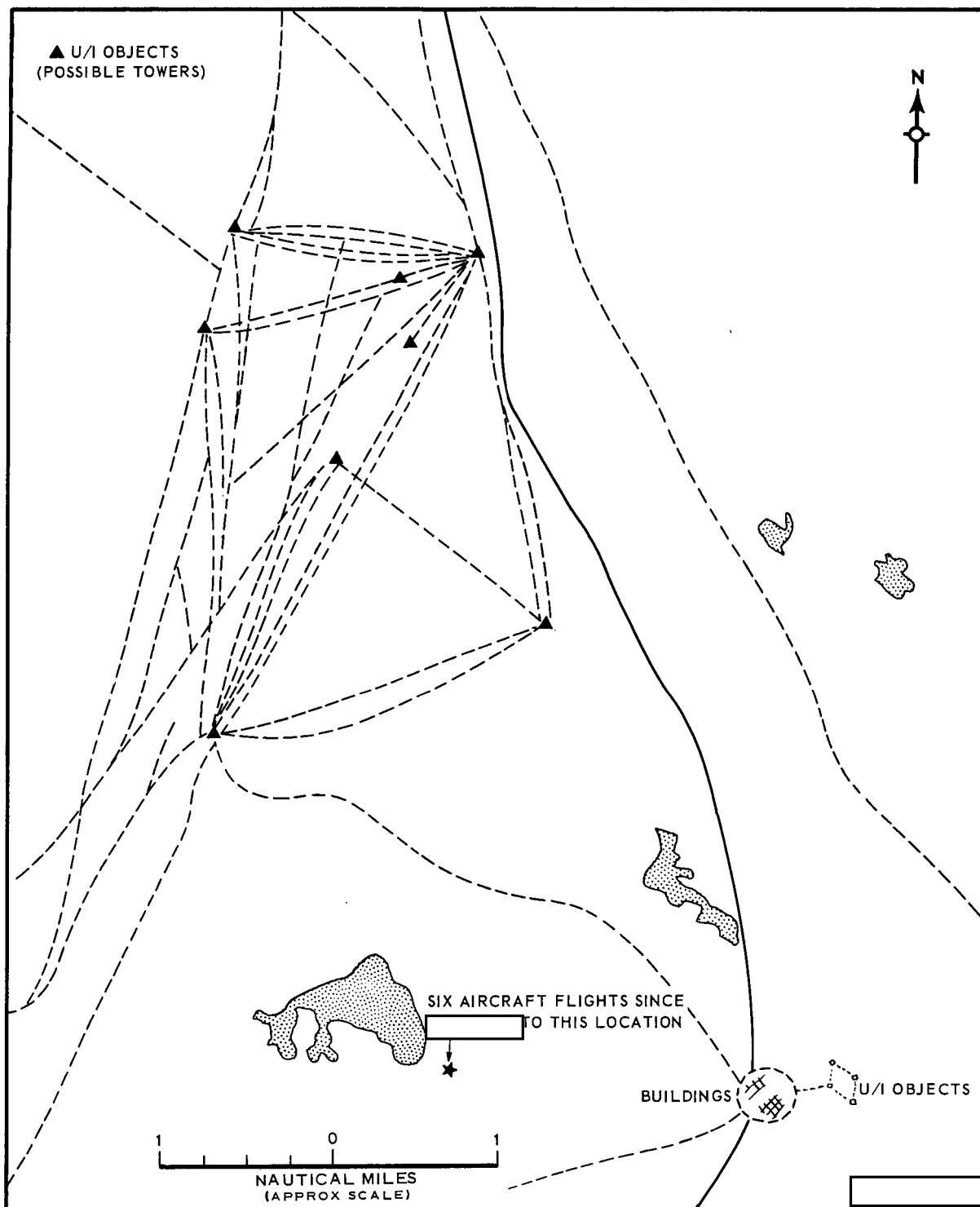


FIGURE 4. AREA OF HEAVY GROUND SCARRING AND OTHER ACTIVITIES NW OF MAKAT. Recent aircraft flights indicate an important project under way in this area.

TOP SECRET

25X1

TOP SECRET

PIC/JR-4/61

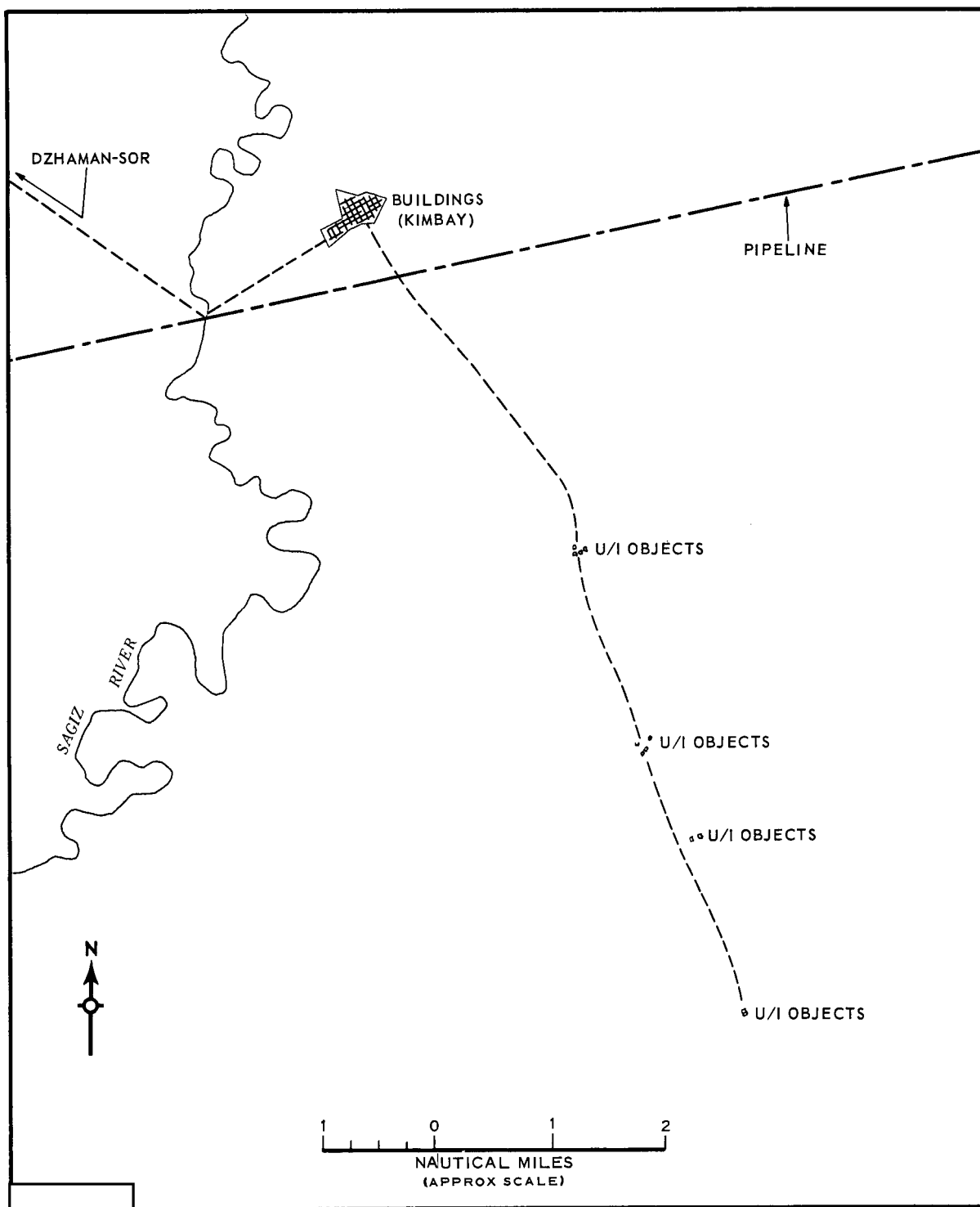


FIGURE 5. KIMBAY AND AREA OF UNIDENTIFIED ACTIVITY. The groups of unidentified objects resemble launch revetments near Chelkar.

TOP SECRET

~~TOP SECRET~~

25X1

PIC/JR-4/61

FLIM FLAM station. The oil pipeline from Makat crosses the Kimbay area but does not appear to be associated with it.

The suspect area includes the village of Kimbay, consisting of more than 50 probable small buildings, and 4 groups of unidentified objects aligned in a northwest-southeast direction over a distance of 7 miles. Each group consists of a cluster of either two or four objects. These groups of objects are similar in general appearance to the launch revetments seen near Chelkar. The village of Kimbay appears more complex than other villages in the Makat area.

Suspect Area 3

Four miles north of the support area for the Makat FLIM FLAM Station is an area of unidentified activity (see Figure 3). This area contains a possible airstrip, 2,500 feet long and oriented northeast-southwest, and two groups of unidentified objects. The area is served by a road showing heavy trackage from the FLIM FLAM support area. Although the function of this area may be electronic in nature, this cannot be determined from the photography, and it must be thus considered a possible location for the SSM field launch point.

CONCLUSIONS

1. The SSATC-associated launch site for the SSM possibly fired from the Makat area to the "T-1" impact area cannot be identified on the photography, but three suspect areas have been located.
2. The Makat FLIM FLAM Station has been identified and located on photography.
3. KYMTR Outstation A30C/D and VDSTR Outstation B02C are possibly colocated with the Makat FLIM FLAM Station.
4. Activity is evident on the photography at or near the reported locations of the impact areas for the KYMTR 300-mile SSM and the VDSTR "CHERUB" ASM.

~~TOP SECRET~~

25X1

~~TOP SECRET~~

25X1

PIC/JR-4/61

REFERENCES

25X1D

CHARTS

ACIC. USAF Pilotage Chart, Sheet 247 A, 1st ed, Dec 56, scale 1:500,000 (U)

ACIC. USAF Pilotage Chart, Sheet 236 D, 1st ed, Dec 56, scale 1:500,000 (U)

DOCUMENTS

1. CIA. PIC/JB-128/60, FLIM FLAM Station 25 nm NE of Makat, USSR, 22 Dec 60 (TS [])
2. NSA. [] Communications Structure of the KYMTR, 1 Dec 58 - 31 Aug 60, 21 Oct 60 (TS [])
3. NSA. [] Vladimirovka Advanced Weapons and Research Complex, Locations and Functions, 1 Feb 58 - 1 Aug 60, 30 Sep 60 (TS [])
4. NSA. [] Development of an Operational 300 Nautical Mile Range Ballistic Missile Weapons System at the KYMTR, 10 Oct 58 (TS [])
5. NSA. [] First Firing of a Probable Cruise Missile to the D (300-325 m) Impact Area on the KYMTR on 27 Sep 60, Oct 60 (TS [])
- NSA. [] New Communications Group Active Since 14 Sep 60 on the KYMTR Designated as the A41 Group, 21 Oct 60 (TS [])

25X1

~~TOP SECRET~~

25X1

~~TOP SECRET~~

PIC/JR-4/61

- X1 NSA. [] KYMTR and Associated Flight Activity,
X1 Sep 60, 21 Mar 61 (TS [])
- X1 NSA. [] Continued Appearance of the Possible
X1 Naval Associated FPN 59108 on the A03 Group of the KYMTR,
X1 24 Mar 61 (TS [])
6. NSA. [] Radar in Terminal Phase of Flight
of KH-20 Missile on the VDSTR, 6 Mar 59 (TS [])
- NSA. Forthcoming report.
- X1 7. NSA. [] D01 Group of the SSATC Redesignated
as the D03 Group, 31 Mar 61 (TS [])
- Air. AFSSOP Daily Roundup, RU 61-069, 4 Apr 61 (TS [])
8. CIA. PIC/JR-16/60, Location and Description of FLIM FLAM
Station No 3, Lake Balkhash, USSR, Jul 60 (TS [])
- X1 9. NSA. [] Special Operations Involving the Nom-
inal 150 nm Range Ballistic Missile Weapons System Conducted
at the KYMTR, 9 Sep 54 - 31 May 58, 28 Aug 59 (TS [])
- X1 NSA. [] R&D Operations Involving Nominal
150 nm Range Ballistic Missile Weapon Systems Conducted at
the KYMTR, 7 May 54 - 31 May 58, 7 Dec 59 (TS [])
10. Army. DC 216-60, The Chelkar Launch Site, Sep 60 (TS [])
11. Air, ATIC. Teletape, 27 Mar 61, A4F3-25-3-214, Para "D" (TS [])

~~TOP SECRET~~

Approved For Release 2005/06/08 : CIA-RDP78T04751A000100010004-0

TOP SECRET

Approved For Release 2005/06/08 : CIA-RDP78T04751A000100010004-0

TOP SECRET